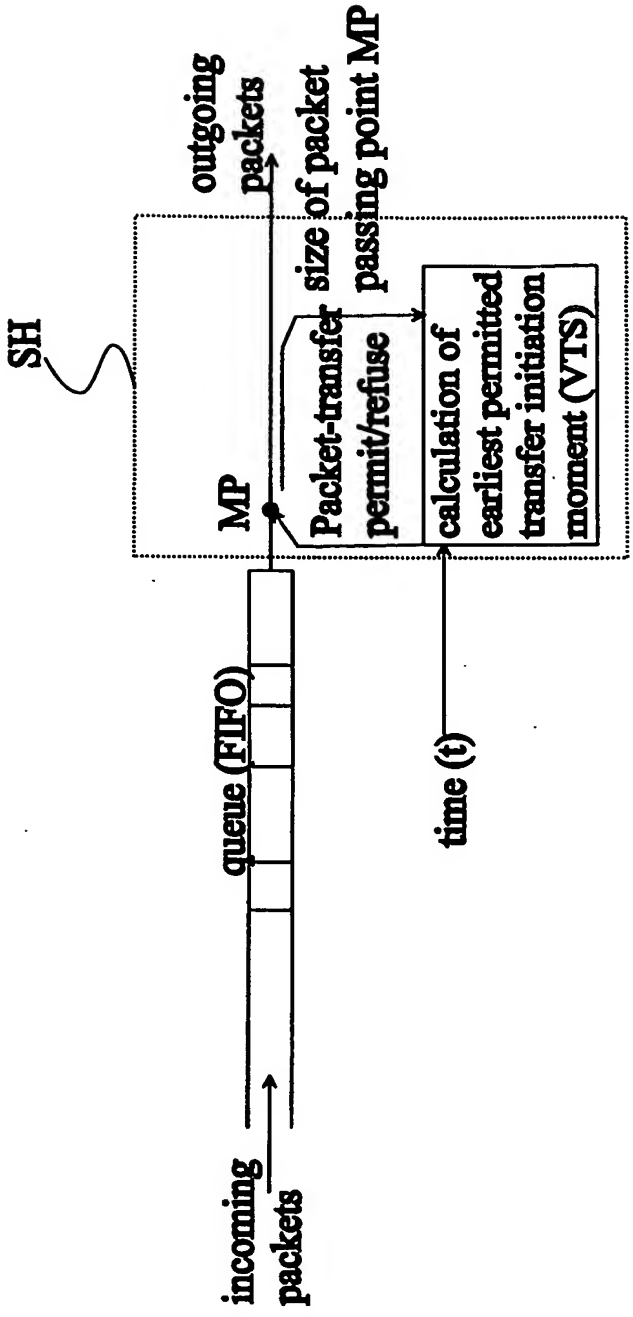

SH
outgoing packets
size of packet passing point MP
MP
Packet-transfer permit/refuse
calculation of earliest permitted transfer initiation moment (VTS)
queue (FIFO)
time (t)
incoming packets

Figure 1

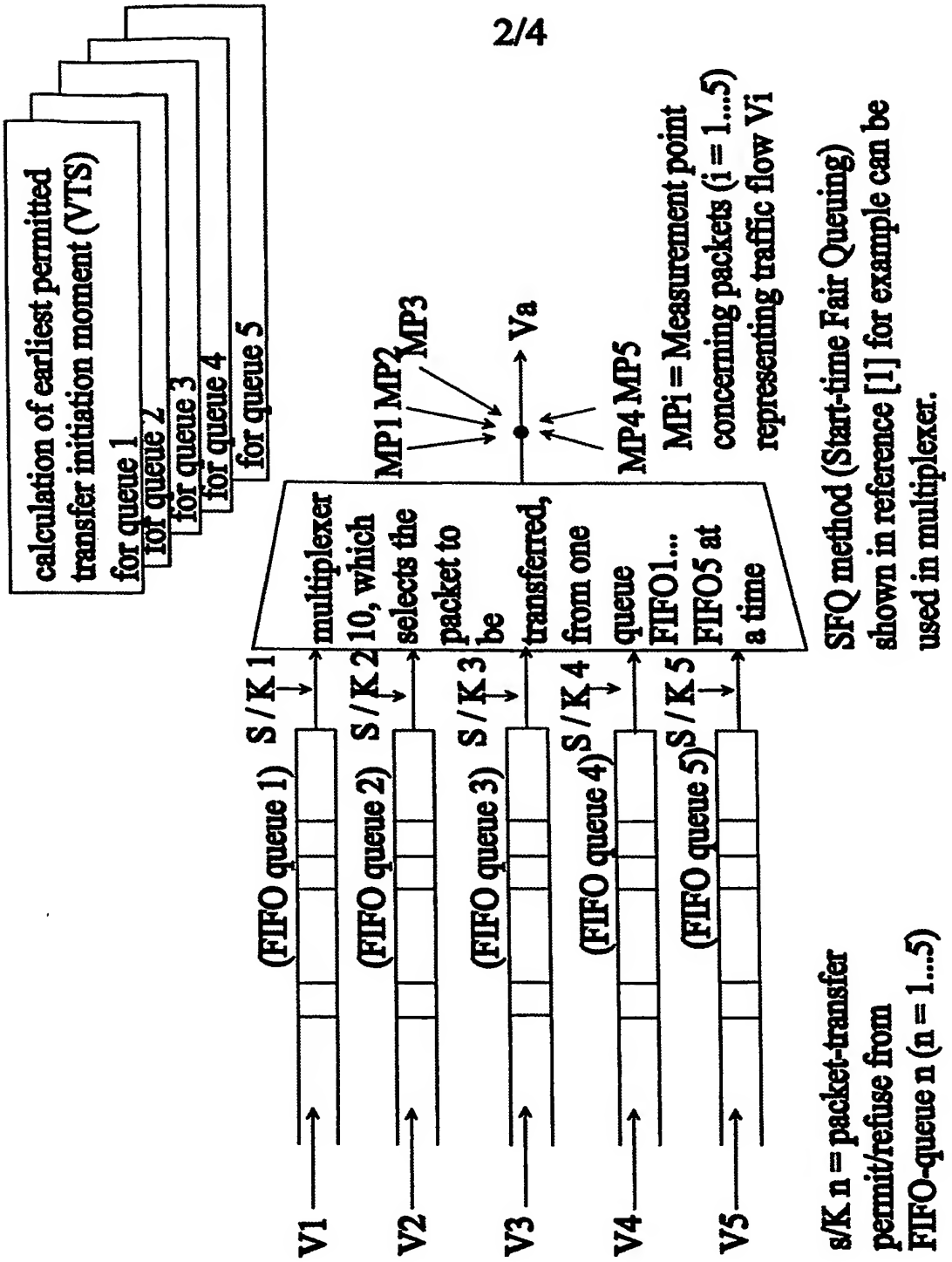

calculation of earliest permitted transfer initiation moment (VTS) for queue 1
for queue 2
for queue 3
for queue 4
for queue 5
multiplexer 10, which selects the packet to be transferred, from one queue FIFO1... FIFO5 at a time
MP1 MP2 MP3
Va
MP4 MP5
MPi = Measurement point concerning packets (i = 1...5) representing traffic flow Vi
S / K 1
S / K 2
S / K 3
S / K 4
S / K 5
(FIFO queue 1)
(FIFO queue 2)
(FIFO queue 3)
(FIFO queue 4)
(FIFO queue 5)
V1
V2
V3
V4
V5
s/K n = packet-transfer permit/refuse from FIFO-queue n (n = 1...5)
SFQ method (Start-time Fair Queuing) shown in reference [1] for example can be used in multiplexer.

Figure 2

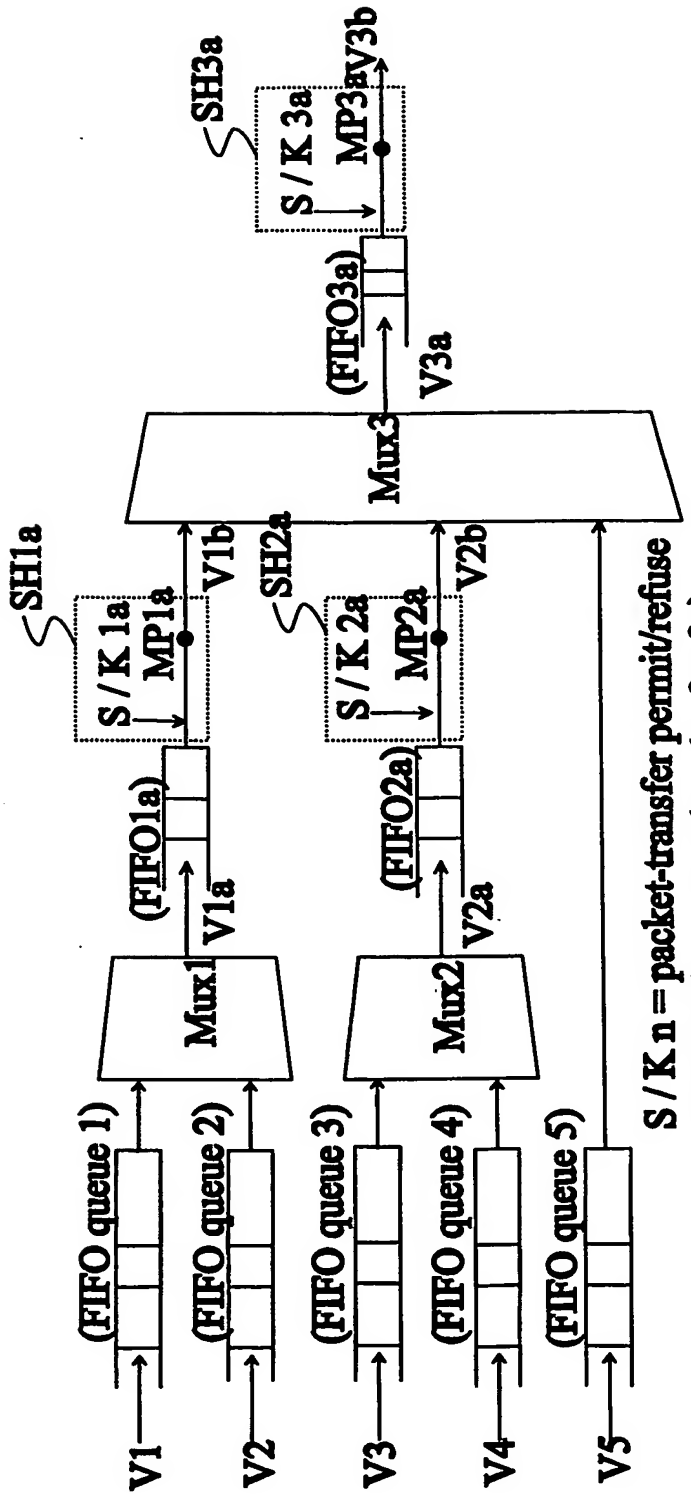
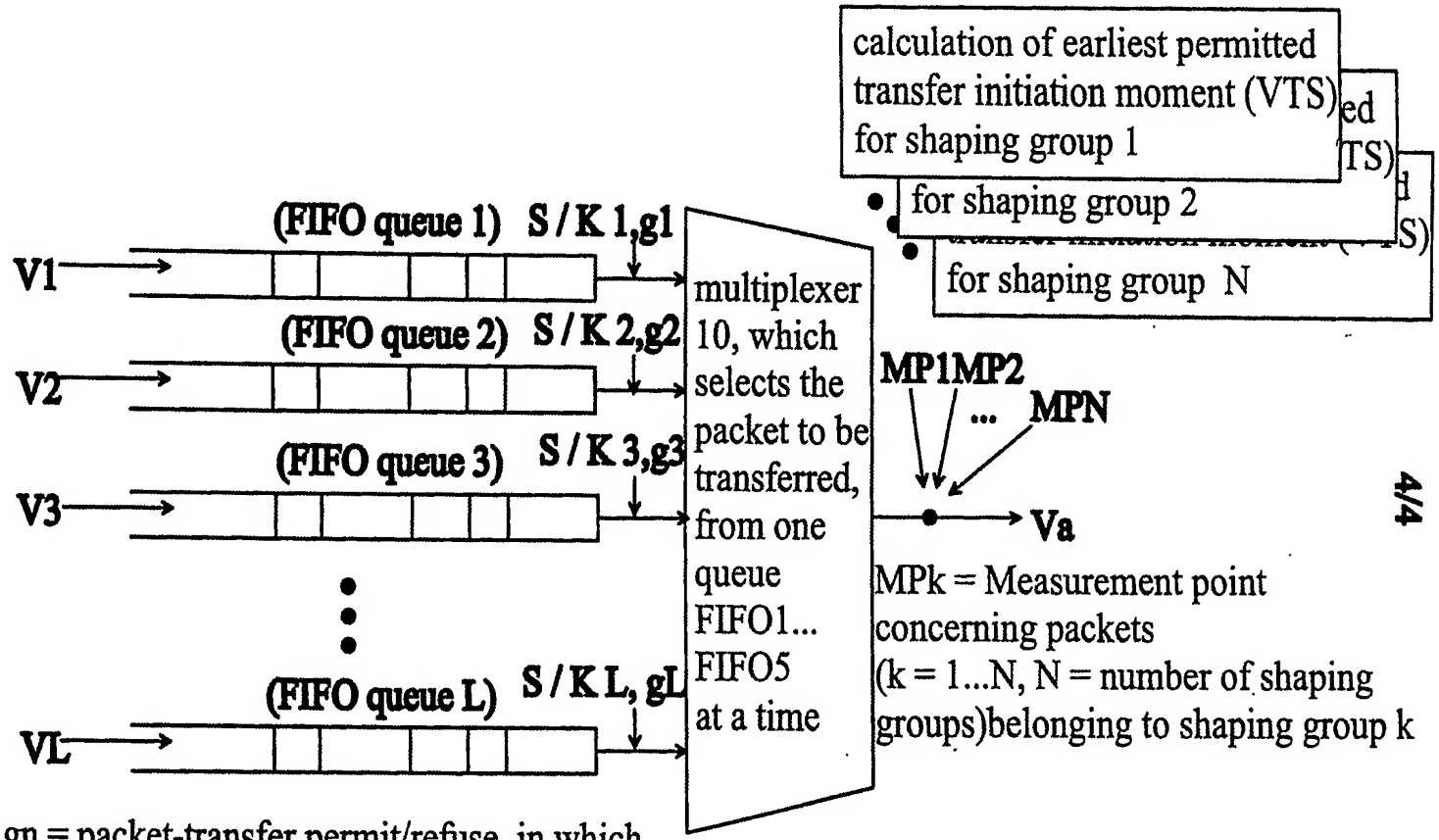

SH3a
S / K 3a
MP3a
V3b
(FIFO3a)
V3a
Mux3
SH1a
S / K 1a
MP1a
V1b
SH2a
S / K 2a
MP2a
V2b
(FIFO1a)
V1a
(FIFO2a)
V2a
Mux1
Mux2
(FIFO queue 1)
(FIFO queue 2)
(FIFO queue 3)
(FIFO queue 4)
(FIFO queue 5)
V1
V2
V3
V4
V5
S / K n = packet-transfer permit/refuse from FIFO queue n (n = 1a, 2a, 3a)
MPn = measurement point concerning packets (n = 1a, 2a, 3a) representing traffic flow Vn

Figure 3



MPk = Measurement point concerning packets (k = 1...N, N = number of shaping groups)belonging to shaping group k

S/K n, gn = packet-transfer permit/refuse, in which all shaping groups to which traffic flow n belongs (n = 1...L, gn = the set of shaping groups, to which the traffic flow n belongs) are taken into account

SFQ method (Start-time Fair Queuing) shown in reference [1] for example can be used in multiplexer.

Figure 4